

SEQUENCE LISTING

<110> WEISMAN, LOIS

<120> INTRACELLULAR SIGNALING PATHWAYS IN DIABETIC SUBJECTS

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<141> 2004-03-02

<150> 60/452,782

<151> 2003-03-07

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<170> PatentIn Ver. 2.1

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<211> 2099

<212> PRT

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<212> PRT
<213> Homo sapiens

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Glu Thr Lys Tyr Arg Val Leu Lys Ile Asp Arg Thr Glu Pro Lys Asp
      35              40              45

Leu Val Ile Ile Asp Asp Arg His Val Tyr Thr Gln Gln Glu Val Arg
      50              55              60

Glu Leu Leu Gly Arg Leu Asp Leu Gly Asn Arg Thr Lys Met Gly Gln
      65              70              75              80

Lys Gly Ser Ser Gly Leu Phe Arg Ala Val Ser Ala Phe Gly Val Val
      85              90              95

Gly Phe Val Arg Phe Leu Glu Gly Tyr Tyr Ile Val Leu Ile Thr Lys
      100             105             110

Arg Arg Lys Met Ala Asp Ile Gly Gly His Ala Ile Tyr Lys Val Glu
      115             120             125

Asp Thr Asn Met Ile Tyr Ile Pro Asn Asp Ser Val Arg Val Thr His
      130             135             140

Pro Asp Glu Ala Arg Tyr Leu Arg Ile Phe Gln Asn Val Asp Leu Ser
      145             150             155             160

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 Tyr Asn Leu Thr Val Leu Arg Met Pro Leu Glu Met Leu Lys Ser Glu
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 Leu Ile Thr Gln Gly Gly Ser Gly Val Phe Gly Ile Cys Ser Glu Pro
 210 215 220
 Tyr Met Lys Tyr Val Trp Asn Gly Glu Leu Leu Asp Ile Ile Lys Ser
 225 230 235 240
 Thr Val His Arg Asp Trp Leu Leu Tyr Ile Ile His Gly Phe Cys Gly
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 Gln Ser Lys Leu Leu Ile Tyr Gly Arg Pro Val Tyr Val Thr Leu Ile
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 Leu Cys Asp Ala Ser Val Met Ser Phe Thr Ala Gly Ser Tyr Ser Ser
 305 310 315 320
 Tyr Val Gln Val Arg Gly Ser Val Pro Leu Tyr Trp Ser Gln Asp Ile
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 Ser Thr Met Met Pro Lys Pro Pro Ile Thr Leu Asp Gln Ala Asp Pro
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 Phe Ala His Val Ala Ala Leu His Phe Asp Gln Met Phe Gln Arg Phe
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 Gly Ser Pro Ile Ile Ile Leu Asn Leu Val Lys Glu Arg Glu Lys Arg
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 Lys His Glu Arg Ile Leu Ser Glu Glu Leu Val Ala Ala Val Thr Tyr
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 Asp Met Ala Lys Tyr Thr Lys Ser Lys Leu Cys Asn Val Leu Asp Arg
 420 425 430
 Leu Asn Val Ile Ala Glu Ser Val Val Lys Lys Thr Gly Phe Phe Val
 435 440 445
 Asn Arg Pro Asp Ser Tyr Cys Ser Ile Leu Arg Pro Asp Glu Lys Trp
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Ile	Leu	Arg	Thr	Asn	Cys	Val	Asp	Cys	Leu	Asp	Arg	Thr	Asn	Thr	Ala	485	490	495	
Gln	Phe	Met	Val	Gly	Lys	Cys	Ala	Leu	Ala	Tyr	Gln	Leu	Tyr	Ser	Leu	500	505	510	
Gly	Leu	Ile	Asp	Lys	Pro	Asn	Leu	Gln	Phe	Asp	Thr	Asp	Ala	Val	Arg	515	520	525	
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Tyr	Gly	Gly	Ser	Gln	Leu	Val	His	Arg	Val	Lys	Thr	Tyr	Arg	Lys	Ile	545	550	555	560
Ala	Pro	Trp	Thr	Gln	His	Ser	Lys	Asp	Ile	Met	Gln	Thr	Leu	Ser	Arg	565	570	575	
Tyr	Tyr	Ser	Asn	Ala	Phe	Ser	Asp	Ala	Asp	Arg	Gln	Asp	Ser	Ile	Asn	580	585	590	
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Lys	Lys	Leu	Ile	Val	Lys	Lys	Phe	His	Lys	Tyr	Glu	Glu	Glu	Ile	Asp	660	665	670	
Ile	His	Asn	Glu	Phe	Phe	Arg	Pro	Tyr	Glu	Leu	Ser	Ser	Phe	Asp	Asp	675	680	685	
Thr	Phe	Cys	Leu	Ala	Met	Thr	Ser	Ser	Ala	Arg	Asp	Phe	Met	Pro	Lys	690	695	700	
Thr	Val	Gly	Ile	Asp	Pro	Ser	Pro	Phe	Thr	Val	Arg	Lys	Pro	Asp	Glu	705	710	715	720
Thr	Gly	Lys	Ser	Val	Leu	Gly	Asn	Lys	Ser	Asn	Arg	Glu	Glu	Ala	Val	725	730	735	
Leu	Gln	Arg	Lys	Thr	Ala	Ala	Ser	Ala	Pro	Pro	Pro	Pro	Ser	Glu	Glu	740	745	750	
Ala	Val	Ser	Ser	Ser	Ser	Glu	Asp	Asp	Ser	Gly	Thr	Asp	Arg	Glu	Glu	755	760	765	

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 Gly Asp Ser Ala Lys Val Thr Glu Asn Val Val Gln Pro Met Lys Glu
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 805 810 815
 Ile Tyr Ser Arg Phe Val Gln Leu Gly Gln Ser Gln His Lys Gln Asp
 820 825 830
 Lys Asn Ser Gln Gln Pro Cys Ser Arg Cys Ser Asp Gly Val Ile Lys
 835 840 845
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 850 855 860
 Pro Pro Arg Val Asp Arg Lys Ser Thr Glu Ile Phe Gln Ala His Ile
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 <212> PRT
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Ile Glu Lys Leu Val Arg Glu Phe Val Ala Gln Asn Asn Thr Val Gln
      35              40              45

Ile Lys His Val Ile Gln Thr Leu Ser Gln Glu Phe Ala Leu Ser Gln
      50              55              60

His Pro His Ser Arg Lys Gly Gly Leu Ile Gly Leu Ala Ala Cys Ser
      65              70              75              80

Ile Ala Leu Gly Lys Asp Ser Gly Leu Tyr Leu Lys Glu Leu Ile Glu
      85              90              95

Pro Ala Leu Thr Cys Phe Asn Asp Ala Asp Ser Arg Leu Arg Tyr Tyr
      100             105             110

Ala Cys Glu Ala Leu Tyr Asn Ile Val Lys Val Ala Arg Gly Ala Val
      115             120             125

Leu Pro His Phe Asn Val Leu Phe Asp Gly Leu Ser Lys Leu Ala Ala
      130             135             140

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Ile	Pro	Leu	Leu	Arg	Glu	Arg	Ile	Tyr	Ser	Asn	Asn	Gln	Tyr	Ala	Arg	180	185	190	
Gln	Phe	Ile	Ile	Ser	Trp	Ile	Leu	Val	Leu	Glu	Ser	Val	Pro	Asp	Ile	195	200	205	
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Gly	Glu	Phe	Leu	Lys	Glu	Ile	Lys	Lys	Asn	Pro	Ser	Ser	Val	Lys	Phe	245	250	255	
Ala	Glu	Met	Ala	Asn	Ile	Leu	Val	Ile	His	Cys	Gln	Thr	Thr	Asp	Asp	260	265	270	
Leu	Ile	Gln	Leu	Thr	Ala	Met	Cys	Trp	Met	Arg	Glu	Phe	Ile	Gln	Leu	275	280	285	
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Ala	Asn	Val	Cys	Asn	Gln	Ser	Leu	Met	Lys	Leu	Val	Thr	Pro	Glu	Asp	325	330	335	
Asp	Glu	Leu	Asp	Glu	Leu	Arg	Pro	Gly	Gln	Arg	Gln	Ala	Glu	Pro	Thr	340	345	350	
Pro	Asp	Asp	Ala	Leu	Pro	Lys	Gln	Glu	Gly	Thr	Ala	Ser	Gly	Gly	Pro	355	360	365	
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Thr	Arg	Ile	Ala	Val	Leu	Lys	Trp	Leu	Tyr	His	Leu	Tyr	Ile	Lys	Thr	420	425	430	
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 485 490 495
 Val Pro Thr Pro Gly Arg Ala Gly Leu Leu Asn Thr Ser Gly Thr Lys
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 Gly Leu Glu Cys Ser Pro Ser Thr Pro Thr Met Asn Ser Tyr Phe Tyr
 515 520 525
 Lys Phe Met Ile Asn Leu Leu Lys Arg Phe Ser Ser Glu Arg Lys Leu
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 625 630 635 640
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 675 680 685
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 705 710 715 720
 Pro Asn Pro Glu Leu Leu Gln Thr Glu Asp Ser Leu Lys Ala Ala Pro
 725 730 735
 Lys Ser Gln Lys Ala Asp Ser Pro Ser Ile Asp Tyr Ala Glu Leu Leu
 740 745 750

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<211> 880
 <212> PRT
 <213> Vac14 Yeast

<400> 7

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Asn	Glu	Glu	Leu	Gln	Arg	Arg	Ser	Ser	Ala	Leu	Asp	Thr	Arg	Arg	Lys
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Lys	Ser	Gln	Asp	Ser	Asp	Leu	Lys	Gln	Tyr	Trp	Met	Pro	Asp	Ser	Gln
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Cys	Lys	Glu	Cys	Tyr	Asp	Cys	Ser	Glu	Lys	Phe	Thr	Thr	Phe	Arg	Arg
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Val Gln Leu Lys Asp Leu Trp Lys Lys Ile Cys His His Ser Ser Gly		
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Met Glu Phe Gln Asp His Arg Tyr Trp Leu Arg Thr His Pro Asn Cys		
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Trp Arg Asp Ile Ile Val Ser Leu Val Cys Gln Val Val Gln Thr Val		

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Gln Tyr Phe Ser Tyr Asn Gln Met Val Ala Ser Phe Ser Tyr Ser Pro			
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Ile Arg Leu Leu Glu Val Cys Val Pro Leu Pro Lys Ile Phe Ile Lys			
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Arg Gln Ala Pro Leu Lys Val Ser Leu Leu Gln Asp Leu Lys Asp Phe			
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